

*Internal Audit Report*

HOWARD COUNTY  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENVIRONMENTAL SERVICES  
CONTRACT COMPLIANCE REVIEW  
REFUSE, RECYCLING, YARDWASTE  
JUNE 2006

*Office of the County Auditor*





## OFFICE OF THE COUNTY AUDITOR

Ronald S. Weinstein, CPA  
County Auditor

July 2006

The County Council and County Executive  
of Howard County, Maryland

Pursuant to Section 212 of the Howard County Charter and Council Resolution 22-1985, we have conducted a review of selected activities of the

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and our report is submitted herewith. The scope of our examination related specifically to a review of contracts related to refuse, recycling and yard-waste and compliance to the terms of those contracts. The body of our report presents our findings and recommendations.

The contents of this report have been reviewed with the Chief Administrative Officer, and the Bureau of Environmental Services Chief and pertinent employees within that office. We wish to express our gratitude to those personnel for the cooperation and assistance extended to us during the course of this engagement.

A handwritten signature in black ink, appearing to read "Ronald S. Weinstein".

Ronald S. Weinstein, C.P.A.  
County Auditor

A handwritten signature in black ink, appearing to read "Keith N. Zumbrun".

Keith N. Zumbrun, C.L.S.A.  
Auditor-in-Charge

## INTRODUCTION AND SCOPE

As part of the County Auditor's activities, we reviewed compliance to the trash, recycling and yard-waste contracts for fiscal year 2005 and fiscal year 2006 thru January 2006. These contracts are initiated and monitored by the Bureau of Environmental Services under the Howard County Department of Public Works. We examined the contracts for compliance with the terms stated, renewal periods, consumer price index and fuel price adjustment calculations and applications, and any other concerns related to this operation. We did not look at the bidding process in this review nor did we examine any related revenue activity associated with refuse.

## BACKGROUND

Trash, recycling and yard-waste contracts are generally 1-year contracts with the possibility of 4 additional 1-year renewals, determined each year based on performance. The County, for purposes of these contracts is divided into zones. There are 15 trash and recycling zones (TRZ), 13 of which include yard-waste collection. TRZ routes 9 and 13 located in Western Howard County do not have yard-waste pickup and TRZ routes 8 and 12 which straddle the County's Metropolitan District Boundary have only partial yard-waste pick-up. Trash and recycling pickup is done once a week per residence year round and the yard-waste pickup is done once a week per residence from April 1 through January 22. Additionally, there is a contract for Front-End Dumpsters (FE) for trash only. There are about 300 dumpsters in the County, which are emptied weekly. Lastly, there is a contract for routes T-1 and T-2 to service recycling totes only. These are the plastic wheeled 96 gallon containers that are in recycling areas and are picked up weekly. The foregoing contracts are for residential collections only except in historic Ellicott City. There, because of the topography of the town and the large number of small commercial establishments, the County collects refuse and owners are charged the appropriate usage fee. Ellicott City has four pick-ups a week. Adjusted fees are also charged in other situations, such as for multiple dwelling units located in one structure. Apartments, commercial businesses and some condominiums contract privately. A list is maintained and sent to the Department of Finance and entered into the property database so that those properties are not charged the annual Refuse Collection Charge (\$175).

The County pays the tipping fee when the contracted vehicle dumps its trash. Howard County uses the Annapolis Junction Transfer Station in Anne Arundel County, under contract with the Northeast Maryland Waste Disposal Authority to dispose of the collected refuse which is taken to Virginia. Collected recycling, (glass, paper, plastic and cardboard), is taken to The Recycle America Processing Facility in Elkridge. Yard-waste is taken to the Regional Composting Facility Transfer Site in Elkridge. Waste is buried at the Alpha Ridge Landfill, in Howard County, only in the event that the Annapolis Junction Transfer Station is not available. The County pays all processing fees for recycling and yard-waste.

## **FINDINGS AND RECOMMENDATIONS**

Payments to contractors are made every two weeks after the contractor submits an invoice to Finance. A Finance employee files the invoice. Although this invoice is looked at, no payment authority occurs until the payment suborder arrives in Finance from Environmental Services. Using the online purchase order system, the partial payments are completed pursuant to the contract of each vendor. The approval process requires authorization online by the Environmental Services Bureau Chief. The preparation and approval of the suborders must be completed at the latest by the Wednesday preceding the Friday payment. Personnel in the bureau who calculate the fuel cost adjustment have created a spreadsheet program for these adjustments, which were written into the contract, in order to compensate for the changing cost of fuel, which is estimated at 5% of the vendor's bid price. We were told that other counties in the State are also using the Howard County method as their model. The adjustment uses fuel prices published in the "Central Atlantic (PABB IB) No. 2 Diesel Retail Sales by All Sellers" schedules prepared by the Energy Information Administration, DOE, in the adjustment calculation. An average of the prior 4-week average fuel prices in the region is applied to the formula that contains the initial fuel base cost. We tested the application and calculation of the fuel cost adjustment and found no errors. However, we observed that while the monthly calculated factor was documented, the base cost calculation was not documented. The base cost calculations we observed in our audit period were calculated several months prior to the contract's effective date. Because of the volatility of fuel prices, this gives a more fair starting base price. Although, the base numbers appeared to be in line, documentation of the specific table and time period used should be required. Therefore, we recommend that:

**1. The base fuel cost average calculation be documented and retained for each contractor for verification of billings and to provide the appropriate audit trail.**

**Administrative Response:**

The Administration concurs with this recommendation and the base fuel cost calculation will be included in each contractor's payment file for reference as needed.

The Fuel Adjustment Calculation spreadsheet allows for the calculation of the adjustment as well as documentation of the number of units, unit price, and the frequency of pick-ups. This provides good verification at a glance of the payment for the individual routes. However, there are occasions where other adjustments occur due to the semi-annual audit of units, penalties assessed for non-performance issues and retroactive adjustments. The spreadsheet was designed to allow for the input for these adjustments, but our audit sample indicated the fields were not being used. While documentation was available for the adjustments, applying the amount to the spreadsheet would give a documented history of that payment at a glance and could also be used to provide a history of vendor violations and penalties. In order to capture this information, we recommend that:

**2. All adjustments be recorded on the Fuel Adjustment Calculation worksheet which are included in the calculation for bi-weekly payment to the contract for better and complete documentation of the payment amount.**

**Administrative Response:**

The Administration concurs and has implemented this recommendation.

The contract calls for a semi-annual audit of the number of units in a TRZ route. Currently these audits are scheduled in July and January. Yard-waste pickup continues for most the month due to Christmas tree disposal. This causes an increased chance of adjustments to occur in the payment to the vendor until the number of units determined in the audit is applied regularly. Because of the additional yard waste pickup occurring at that time, 33%) more calculations are required. If the second audit was performed in the 9 weeks when yard-waste is not collected, fewer adjustments would have to be made. We therefore recommend that:

3. Consideration be given to performing the second audit during the 9 weeks when Yard-waste is not being collected to help reduce the number of adjustments to the payments during the period.

Administrative Response:

The Administration concurs with this recommendation. The Department of Public Works will be shifting the winter semi-annual audit from January to a February/March timeframe. In order to preserve the six month spacing of the semi-annual audits, the audit currently scheduled for July will also be shifted to an August/September timeframe.

The contracts require the Office of Purchasing to recalculate the pricing annually based on the Consumer Price Index (CPI). This gives the Contractor a reasonable basis for bidding. The Bureau of Labor and Statistics Urban index for the Howard County region is used. The initial month has been written into each contract and can be up to six months old before the contract actually commences. Additionally, for testing of the CPI adjustments the calculations must be redone because there is not documentation of the initial contract calculations. We noted that the change order used to show the new unit pricing and showed the annual CPI change on the face of the document. In order to document an audit trail and the CPI adjusted amount, the CPI adjustment calculation should be shown on the change order. The unit pricing on these refuse contracts should be shown on both the change order and the initial contract. We therefore recommend :

4. All the CPI calculations should be documented and included on the change order with the unit price changes as well as the initial award.

Administrative Response:

The Administration concurs with this recommendation. In order to document an audit trail and the CPI adjusted amount, the CPI adjustment calculation will be shown on the change order. The Office of Purchasing will also place the unit pricing on both the change order and initial contract award.

We examined the spreadsheet that was developed for the fuel adjustment calculation and determined the derived percentage used had more decimal places than the contract allowed. Section 6.4.2 of the bid document, states that "the calculated adjustment percentage shall be rounded to the nearest tenth of a percentage point". The application of the "round" function in the spreadsheet would fulfill the terms of the contracts and be easier to read. Therefore, we recommend that:

5. *The calculations for the fuel price adjustment adhere to the terms of the contract and be set to the nearest tenth of a percentage point.*

**Administrative Response:**

The Administration concurs and has implemented this recommendation.

We were told that no written procedures were available for the employee who performed the payment process to pay the contractors. There are numerous steps and procedures to follow that should be documented in writing for use by the current and future employees. We therefore recommend that:

6. *A procedures manual for the payment and approval process be developed and maintained for documentation.*

**Administrative Response:**

The Administration concurs with this recommendation and a procedures manual will be prepared. The computation procedures are straightforward and the manual will be in the form of a memorandum, two to three pages in length.

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